

Making a Healthy Investment in Child Development: The Benefits of High-Quality Pre-K

The years before a child enters kindergarten are a critical window for healthy cognitive, physical, social and emotional development. The circumstances and experiences children have during these early years can shape their health and success for a lifetime.

Unfortunately, too many young children face obstacles that hinder healthy development, including the effects of poverty and other adverse conditions beyond their control. About 3 in 5 of Pennsylvania's preschool-age children live in lower-income households,ⁱ which can jeopardize healthy development and put them at greater risk of academic failure.

High-quality pre-kindergarten is a proven tool to help overcome some of the negative impacts many of these young children face, and research shows it is beneficial to children at risk due to economic circumstances and/or family social

and emotional issues. High-quality pre-k programs not only prepare children for success in school and in life, but they also have been shown to promote good health in childhood and into adulthood.ⁱⁱ

The American Academy of Pediatrics (AAP) has long advocated ensuring children have access to high-quality pre-k and other early learning opportunities that meet the full array of a child's developmental needs. The AAP encourages parents to talk to their pediatricians about child development and advocates that pediatricians strive to prompt and encourage that conversation.

At the same time, the Pennsylvania Chapter of the AAP encourages our state to increase access to high-quality pre-k in an effort to ensure more children can benefit from this once-in-a-lifetime learning opportunity that promotes healthy development.



American Academy
of Pediatrics



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Pennsylvania Chapter

May 2016

Shaping a Young Mind for Success

When we invest in the healthy development of our children through proven strategies like high-quality pre-k, the impact is broad and long-lasting. Research shows high-quality pre-k:

Improves language, literacy and math skills as children enter kindergarten.



Reduces special education placements and the need for remediation or grade repetition in K-12 schools.



Increases the likelihood of high school graduation and college enrollment.



Mitigates disruptive behaviors that can lead to antisocial behaviors and, in the most extreme cases, criminal behavior.

When a young child's developmental needs are met, the long-term benefits are tangible for not only the child, but also for other children, our communities and our commonwealth. Conversely, we all pay for the long-term impacts of children whose developmental needs aren't addressed early on. For many children, including those in lower income households, one of the most detrimental factors undermining their health and success is "toxic stress."



What defines toxic stress? Everyone experiences stress, and learning to cope in the face of stressful or adverse experiences can help children develop resiliency and healthy responses.ⁱⁱⁱ But when the stress is extreme, frequent and long-lasting - such as stress related to economic insecurity or exposure to violence - a child's stress response can negatively impact brain development.

This is toxic stress, and research has shown it can actually alter the architecture of a young developing brain.^{iv} If left unaddressed, toxic stress can lead to behavioral and cognitive issues that can undermine school success and take a toll on a child's emotional, intellectual and physical health well into adulthood.

Research shows young children who endure toxic stress face higher risks of cancer, cardiovascular disease, depression and other health issues as adults.^v

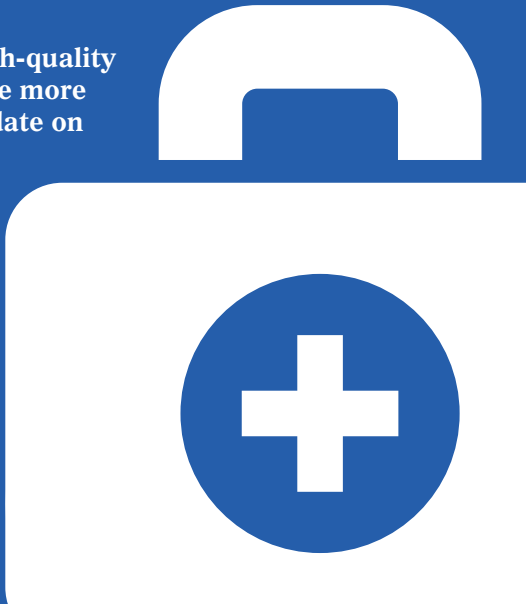
The link between toxic stress and poverty – and the impact both have on healthy brain development^{vi} – led the AAP to recently issue guidance for pediatricians to conduct "poverty screens" to help detect toxic stress. The AAP notes that having pediatricians ask a single question during well-child visits - such as 'Do you have difficulty making ends meet at the end of the month?' - can help identify families dealing with household stress related to poverty and help connect them with community resources that can help.^{vii}

Research shows one of the most effective ways to lessen the impact of toxic stress is through caring relationships and stable, supportive environments. High-quality pre-k programs provide such an environment, enabling young children to learn and develop free from the adverse conditions that can create persistent stress and anxiety.

Pennsylvania's publicly funded pre-k encompasses the health and safety standards that are a critical part of quality early learning programs, setting them apart from lesser quality programs that might not provide the necessary environment for young learners to thrive. A young learner in a high-quality setting is likely to be more focused and engaged, meaning fewer disruptions or delays that can sidetrack the child or others.

High-quality pre-k programs also have been shown to have other health benefits:

Research shows participants in high-quality pre-k programs are more likely to be up to date on vaccinations and have more positive health and safety habits in their homes.^{viii}



These health-related benefits not only help the individual, but they also help society by lowering health care costs, especially those associated with chronic illnesses or disease in adulthood.^{ix}



Children who benefited from high-quality early learning programs tend to have better diets and exercise routines as adults, lower rates of smoking or substance abuse and lower risks of diabetes, stroke or heart disease.



In addition to benefits directly related to better health, high-quality pre-k also has been shown to improve school readiness and academic success, increase graduation rates and boost lifetime earning potential, and reduce societal costs associated with antisocial or criminal behavior.



But these benefits cannot be fully realized if high-quality pre-k is not available to more young learners. Unfortunately, lack of access to high-quality pre-k is an issue across Pennsylvania, in large part due to a failure to adequately invest in it at the state level.

The most recent data shows that, among the approximately 175,000 Pennsylvania 3- and 4-year-olds at greatest risk of academic failure due to living in lower-income households, nearly 70 percent – or about 120,000 children – lack access to publicly funded, high-quality pre-k. Stronger state investments in programs like Pre-K Counts and Head Start can boost access to quality pre-k programs, but each year these investments lag is a year of missed opportunities these young learners can never recapture.

Elevating young children above the negative impacts of poverty, stress and related obstacles to learning and development must be a collaborative effort among health care professionals, parents, early learning providers and others – including elected officials who help determine how Pennsylvania should invest in our children. Pediatricians recognize that we are critical partners in this effort to keep children on the right track, and that partnership includes calling on our state leaders to recognize the importance of pre-k and sufficiently fund it to increase access.

Conclusion

Investing in high-quality pre-k to increase access to it – especially among at-risk children – can help promote good health and reduce the risk of disease in adulthood, and it has long-term benefits for our children, our schools and our communities.^x

Despite these proven benefits, many Pennsylvania children who are at risk due to economic challenges have no access to publicly funded, high-quality pre-k, representing missed opportunities and lost potential.

“We know investing in high-quality pre-k pays off in multiple ways, which is why the PA AAP has made it a priority to elevate this important discussion,” said Dr. Susan Kressly, president of the Pennsylvania Chapter of the American Academy of Pediatrics (PA AAP). “Every year that we defer investments in early learning is another year of lost opportunities that can never be regained – and those lost opportunities have serious repercussions on the health and well-being of our kids.

“Pennsylvania should make more aggressive investments in high-quality pre-k programs and sustain those investments if we want to fully benefit from the long-term health, social and economic benefits pre-k provides.”

The PA AAP supports the Pre-K for PA goal of expanding access to high-quality pre-k to all at-risk children and more middle-income families across the commonwealth.

To make a significant step toward this goal now, Pennsylvania should enact a state budget that increases funding for high-quality pre-k by \$90 million in fiscal 2016-17 so an additional 7,400 children can benefit.

Even with such a new investment, more than 107,000 at-risk preschool children would lack access to high-quality pre-k next year. We can reach more of these children by investing an additional \$470 million in pre-k programs over the next three fiscal years, including the \$90 million increase needed for fiscal 2016-17.

These common-sense investments will help our young learners be healthier and better prepared for success in school and beyond, saving the commonwealth money in the long term and making Pennsylvania a better place for children and families to thrive and prosper.

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Source Citations for Making a Healthy Investment in Child Development: The Benefits of High-Quality Pre-k

ⁱ [The Case for Pre-K in PA](#), county-level data, published by Pennsylvania Partnerships for Children and Pre-K for PA, March 2016

ⁱⁱ [Early Childhood Education: Pathways to Better Health](#), National Institute for Early Education Research, April 2013

ⁱⁱⁱ [Toxic Stress](#), Center on the Developing Child at Harvard University.

^{iv} [Building a New Biodevelopmental Framework to Guide the Future of Early Childhood Policy](#), Jack B. Shonkoff, Child Development, January/February 2010, Volume 81, Number 1, Pages 357–367

^v [The Science of Early Life Toxic Stress for Pediatric Practice and Advocacy](#), Pediatrics Volume 131, Number 2, February 2013

^{vi} [Association of Child Poverty, Brain Development, and Academic Achievement](#), Nicole Hair, et. al., JAMA Pediatrics 2015;169(9):822-829.

^{vii} [Poverty and Child Health in the United States](#), American Academy of Pediatrics Council on Community Pediatrics policy statement, Pediatrics Volume 137, Number 4, April 2016.

^{viii} [Head Start's Lasting Benefits](#), W. Steven Barnett & Jason T. Hustedt, Infants & Young Children, Vol. 18, No. 1, pp. 16–24

^{ix} [Early Childhood Education: Pathways to Better Health](#), National Institute for Early Education Research, April 2013

^x [The Foundations of Lifelong Health Are Built in Early Childhood](#), Center on the Developing Child at Harvard University, July 2010